

Amendments to the Claims:

1 1. (canceled)

1 2. (previously presented) The method of Claim 15, further comprising de-aggregating the
2 aggregated media payload for one or more destination endpoints by separating the
3 aggregated media payload to result in creating and sending restored copies of the two
4 or more media packets, wherein each media packet corresponds to one of the two or
5 more concurrent calls.

1 3. (previously presented) The method of Claim 15, wherein aggregating the two or more
2 media packets comprises compressing one or more headers of each media packet.

1 4. (canceled)

1 5. (previously presented) The method of Claim 15, wherein the step of aggregating two
2 or more media packets further comprises the steps of:
3 compressing an IP header and a UDP header of each RTP packet to form a
4 corresponding uncompressed RTP segment; and
5 encapsulating the two or more uncompressed RTP segments with the single
6 aggregated header.

1 6. (previously presented) The method of Claim 21, wherein the step of aggregating two
2 or more media packets further comprises the steps of:
3 compressing an IP header, a UDP header, and an RTP header of each RTP packet to
4 form a corresponding compressed RTP segment; and
5 encapsulating the two or more compressed RTP segments with the single aggregated
6 header.

1 7. (canceled)

1 8. (previously presented) The method of Claim 15, wherein the aggregation protocol
2 comprises forming the aggregated media payload based on an aggregated media
3 packet format for each aggregated media packet wherein the aggregated media packet
4 format comprises a version field indicating a version of the aggregation protocol.

1 9. (previously presented) The method of Claim 15, wherein the aggregation protocol
2 comprises forming the aggregated media payload based on an aggregated media
3 packet format for each aggregated media packet wherein the aggregated media packet
4 format comprises a placeholder field that reserves packet space for future use.

1 10. (previously presented) The method of Claim 15, wherein the aggregation protocol
2 comprises forming the aggregated media payload based on an aggregated media
3 packet format for each aggregated media packet wherein the aggregated media packet
4 format comprises a sequence number field that is incremented for each aggregated
5 media packet and is used to detect media packet loss.

1 11. (previously presented) The method of Claim 15, wherein the aggregation protocol
2 comprises forming the aggregated media payload based on an aggregated media
3 packet format for each aggregated media packet wherein the aggregated media packet
4 format comprises a trunk ID field that uniquely identifies a corresponding trunk.

1 12. (previously presented) The method of Claim 15, wherein the aggregation protocol
2 further comprises forming the aggregated media payload based on an uncompressed
3 Real-Time Protocol segment format for each uncompressed Real-Time Protocol

4 segment of the two or more media packets that comprises a context ID field indicating
5 a session context ID for the uncompressed Real-Time Protocol segment.

1 13. (previously presented) The method of Claim 15, wherein the aggregation protocol
2 further comprises forming the aggregated media payload based on an uncompressed
3 Real-Time Protocol segment format for each uncompressed Real-Time Protocol
4 segment of the two or more media packets that comprises a compression bit indicating
5 whether the uncompressed Real-Time Protocol segment is uncompressed.

1 14. (previously presented) The method of Claim 15, wherein the aggregation protocol
2 further comprises forming the aggregated media payload based on an uncompressed
3 Real-Time Protocol segment format for each uncompressed Real-Time Protocol
4 segment of the two or more media packets that comprises a placeholder field for
5 future use.

1 15. (currently amended) A method of efficiently transmitting media information
2 associated with two or more concurrent calls carried in a packet-switched network, the
3 method comprising the computer-implemented steps of:

4 aggregating, according to an aggregation protocol, two or more media packets from
5 the two or more concurrent calls originating from one or more source end
6 points into an aggregated media payload;

7 re-packetizing the aggregated media payload using a single aggregated header to form
8 an aggregated media packet;

9 forwarding the aggregated media packet to a next hop in the packet-switched network;
10 ~~wherein the aggregation protocol further comprises forming the aggregated media~~
11 payload based on an uncompressed Real-Time Protocol segment format for

12 each uncompressed Real-Time Protocol segment of the two or more media
13 packets that comprises a Real-Time Protocol header extension bit indicating
14 whether a Real-Time Protocol header extension appears in the uncompressed
15 Real-Time Protocol segment.

1 16. (previously presented) The method of Claim 15, wherein the aggregation protocol
2 further comprises forming the aggregated media payload based on an uncompressed
3 Real-Time Protocol segment format for each uncompressed Real-Time Protocol
4 segment of the two or more media packets that includes a full length field containing a
5 length of a Real-Time Protocol packet that corresponds to the uncompressed Real-
6 Time Protocol segment.

1 17. (previously presented) The method of Claim 15, wherein the aggregation protocol
2 further comprises forming the aggregated media payload based on an uncompressed
3 Real-Time Protocol segment format for each uncompressed Real-Time Protocol
4 segment of the two or more media packets that comprises a Real-Time Protocol
5 payload and a Real-Time Protocol header corresponding to a Real-Time Protocol
6 packet that in turn corresponds to the uncompressed Real-Time Protocol segment.

1 18. (previously presented) The method of Claim 15, wherein the aggregation protocol
2 further comprises forming the aggregated media payload based on an uncompressed
3 Real-Time Protocol segment format for each uncompressed Real-Time Protocol
4 segment of the two or more media packets that comprises a padding field that aligns
5 an end of the uncompressed Real-Time Protocol segment with a next four-byte
6 boundary.

1 19. (previously presented) The method of Claim 21, wherein the aggregation protocol
2 further comprises forming the aggregated media payload based on a compressed Real-
3 Time Protocol segment format for each compressed Real-Time Protocol segment of
4 the two or more media packets that comprises a context ID field indicating a session
5 context ID for the compressed Real-Time Protocol segment.

1 20. (previously presented) The method of Claim 21, wherein the aggregation protocol
2 further comprises forming the aggregated media payload based on a compressed Real-
3 Time Protocol segment format for each compressed Real-Time Protocol segment of
4 the two or more media packets that comprises a compression bit indicating whether
5 the Real-Time Protocol segment is compressed.

1 21. (currently amended) A method of efficiently transmitting media information
2 associated with two or more concurrent calls carried in a packet-switched network, the
3 method comprising the computer-implemented steps of:
4 aggregating, according to an aggregation protocol, two or more media packets from
5 the two or more concurrent calls originating from one or more source end
6 points into an aggregated media payload;
7 re-packetizing the aggregated media payload using a single aggregated header to form
8 an aggregated media packet;
9 forwarding the aggregated media packet to a next hop in the packet-switched network;
10 ~~wherein the aggregation protocol further comprises~~ forming the aggregated media
11 payload based on a compressed Real-Time Protocol segment format for each
12 compressed Real-Time Protocol segment of the two or more media packets
13 that comprises a Real-Time Protocol header extension bit indicating whether a

14 Real-Time Protocol header extension appears in the compressed Real-Time
15 Protocol segment.

1 22. (previously presented) The method of Claim 21, wherein the aggregation protocol
2 further comprises forming the aggregated media payload based on a compressed Real-
3 Time Protocol segment format for each compressed Real-Time Protocol segment of
4 the two or more media packets that comprises a Real-Time Protocol header marker
5 bit.

1 23. (previously presented) The method of Claim 21, wherein the aggregation protocol
2 further comprises forming the aggregated media payload based on a compressed Real-
3 Time Protocol segment format for each compressed Real-Time Protocol segment of
4 the two or more media packets that comprises a length field containing a length of a
5 Real-Time Protocol payload of a Real-Time Protocol packet of the compressed Real-
6 Time Protocol segment.

1 24. (previously presented) The method of Claim 21, wherein the aggregation protocol
2 further comprises forming the aggregated media payload based on a compressed Real-
3 Time Protocol segment format for each compressed Real-Time Protocol segment of
4 the two or more media packets that comprises a sequence number field carrying a
5 Real-Time Protocol header sequence number.

1 25. (previously presented) The method of Claim 21, wherein the aggregation protocol
2 further comprises forming the aggregated media payload based on a compressed Real-
3 Time Protocol segment format for each compressed Real-Time Protocol segment
4 wherein the compressed Real-Time Protocol segment format comprises a timestamp
5 field carrying a Real-Time Protocol header timestamp.

1 26. (canceled)

1 27. (previously presented) The method of Claim 21, wherein the aggregation protocol
2 further comprises forming the aggregated media payload based on a compressed Real-
3 Time Protocol segment format for each compressed Real-Time Protocol segment of
4 the two or more media packets that comprises a padding field that aligns an end of the
5 compressed Real-Time Protocol segment with a next boundary.

1 28. (canceled)

1 29. (canceled)

1 30. (canceled)

1 31. (canceled)

1 32. (canceled)

1 33. (canceled)

1 34. (canceled)

1 35. (canceled)

1 36. (new) An apparatus for transmitting media information associated with two or more
2 concurrent calls carried in a packet-switched network, the apparatus comprising:
3 means for aggregating, according to an aggregation protocol, two or more media
4 packets from the two or more concurrent calls originating from one or more
5 source end points into an aggregated media payload;
6 means for re-packetizing the aggregated media payload using a single aggregated
7 header to form an aggregated media packet;

8 means for forwarding the aggregated media packet to a next hop in the packet-
9 switched network;
10 means for forming the aggregated media payload based on an uncompressed Real-
11 Time Protocol segment format for each uncompressed Real-Time Protocol
12 segment of the two or more media packets that comprises a Real-Time
13 Protocol header extension bit indicating whether a Real-Time Protocol header
14 extension appears in the uncompressed Real-Time Protocol segment.

1 37. (new) An apparatus for transmitting media information associated with two or more
2 concurrent calls carried in a packet-switched network, the apparatus comprising:
3 one or more processors coupled to an aggregator for aggregating two or more media
4 packets into an aggregated media packet;
5 a memory accessible to the one or more processors; and
6 one or more sequences of instructions stored in the memory which, when executed by
7 the one or more processors, cause the one or more processors to carry out the
8 steps of:
9 aggregating, according to an aggregation protocol, two or more media packets
10 from the two or more concurrent calls originating from one or more
11 source end points into an aggregated media payload;
12 re-packetizing the aggregated media payload using a single aggregated header
13 to form an aggregated media packet;
14 forwarding the aggregated media packet to a next hop in the packet-switched
15 network;

16 forming the aggregated media payload based on an uncompressed Real-Time
17 Protocol segment format for each uncompressed Real-Time Protocol
18 segment of the two or more media packets that comprises a Real-Time
19 Protocol header extension bit indicating whether a Real-Time Protocol
20 header extension appears in the uncompressed Real-Time Protocol
21 segment.

1 38. (new) A computer-readable medium comprising one or more sequences of
2 instructions for transmitting media information associated with two or more
3 concurrent calls carried in a packet-switched network, which sequences of
4 instructions, when executed by one or more processors, cause the one or more
5 processors to carry out the steps of:
6 aggregating, according to an aggregation protocol, two or more media packets from
7 the two or more concurrent calls originating from one or more source end
8 points into an aggregated media payload;
9 re-packetizing the aggregated media payload using a single aggregated header to form
10 an aggregated media packet;
11 forwarding the aggregated media packet to a next hop in the packet-switched network;
12 forming the aggregated media payload based on an uncompressed Real-Time Protocol
13 segment format for each uncompressed Real-Time Protocol segment of the
14 two or more media packets that comprises a Real-Time Protocol header
15 extension bit indicating whether a Real-Time Protocol header extension
16 appears in the uncompressed Real-Time Protocol segment.

1 39. (new) An apparatus for efficiently transmitting media information associated with two
2 or more concurrent calls carried in a packet-switched network, the apparatus
3 comprising:
4 means for aggregating, according to an aggregation protocol, two or more media
5 packets from the two or more concurrent calls originating from one or more
6 source end points into an aggregated media payload;
7 means for re-packetizing the aggregated media payload using a single aggregated
8 header to form an aggregated media packet;
9 means for forwarding the aggregated media packet to a next hop in the packet-
10 switched network;
11 means for forming the aggregated media payload based on a compressed Real-Time
12 Protocol segment format for each compressed Real-Time Protocol segment of
13 the two or more media packets that comprises a Real-Time Protocol header
14 extension bit indicating whether a Real-Time Protocol header extension
15 appears in the compressed Real-Time Protocol segment.

1 40. (new) An apparatus for efficiently transmitting media information associated with two
2 or more concurrent calls carried in a packet-switched network, the apparatus
3 comprising:
4 one or more processors coupled to an aggregator for aggregating two or more media
5 packets into an aggregated media packet;
6 a memory accessible to the one or more processors; and

7 one or more sequences of instructions stored in the memory which, when executed by
8 the one or more processors, cause the one or more processors to carry out the
9 steps of:
10 aggregating, according to an aggregation protocol, two or more media packets
11 from the two or more concurrent calls originating from one or more
12 source end points into an aggregated media payload;
13 re-packetizing the aggregated media payload using a single aggregated header
14 to form an aggregated media packet;
15 forwarding the aggregated media packet to a next hop in the packet-switched
16 network;
17 forming the aggregated media payload based on a compressed Real-Time
18 Protocol segment format for each compressed Real-Time Protocol
19 segment of the two or more media packets that comprises a Real-Time
20 Protocol header extension bit indicating whether a Real-Time Protocol
21 header extension appears in the compressed Real-Time Protocol
22 segment.

1 41. (new) A computer-readable medium comprising one or more sequences of
2 instructions for transmitting media information associated with two or more
3 concurrent calls carried in a packet-switched network, which sequences of
4 instructions, when executed by one or more processors, cause the one or more
5 processors to carry out the steps of:

6 aggregating, according to an aggregation protocol, two or more media packets from
7 the two or more concurrent calls originating from one or more source end
8 points into an aggregated media payload;
9 re-packetizing the aggregated media payload using a single aggregated header to form
10 an aggregated media packet;
11 forwarding the aggregated media packet to a next hop in the packet-switched network;
12 forming the aggregated media payload based on a compressed Real-Time Protocol
13 segment format for each compressed Real-Time Protocol segment of the two
14 or more media packets that comprises a Real-Time Protocol header extension
15 bit indicating whether a Real-Time Protocol header extension appears in the
16 compressed Real-Time Protocol segment.